

WHAT IS CLAIMED IS:

1. A method of analyzing a multimedia data object that is adapted for rendering on an electronic device, the method comprising:

5 determining rendering requirements of at least a portion of a multimedia data object, wherein the multimedia data object comprises a video multimedia data object having non-uniform data consumption characteristics; and

displaying a consumption graph on a display regarding the rendering requirements of the video multimedia data object.

10 2. The method of Claim 1, additionally comprising transmitting the video multimedia data object to a client computer via a network.

3. The method of Claim 1, additionally comprising determining a buffer size or time based upon the rendering requirements.

4. The method of Claim 1, additionally comprising displaying the determined buffer size or time.

15 5. A method of analyzing a multimedia data object that is adapted for rendering on an electronic device, the method comprising:

determining the rendering requirements of at least a portion of a multimedia data object; and

20 indicating the rendering requirements of the multimedia data object.

6. The method of Claim 5, wherein determining the rendering requirements includes determining the amount of data that is needed to render the multimedia data object at each point of the portion of the multimedia data object.

25 7. The method of Claim 5, wherein determining the rendering requirements includes determining for the portion of the multimedia data object a size of a substantially sufficient amount of data of the multimedia data object that must be sent to a client computer before the client computer renders a multimedia presentation represented by the multimedia data object.

8. The method of Claim 5, wherein the multimedia data object comprises a video multimedia data object having non-uniform data consumption characteristics.

30 9. The method of Claim 5, wherein indicating the rendering requirements further includes plotting a consumption graph on a display.

10. The method of Claim 5, wherein the electronic device comprises a microprocessor.

11. An electronic device configured to analyze a multimedia data object, the electronic device comprising:

5 a module configured to determine the rendering requirements of at least a portion of a multimedia data object and configured to indicate the rendering requirements of the multimedia data object.

12. The electronic device of Claim 11, wherein module determines the amount of data that is needed to render the multimedia data object at each point of the
10 portion of the multimedia data object.

13. The electronic device of Claim 11, wherein the module determines for the portion of the multimedia data object a size of a substantially sufficient amount of data of the multimedia data object that must be sent to a client computer before the client computer renders a multimedia presentation represented by the multimedia data object.

14. The electronic device system of Claim 11, wherein the module displays a consumption graph on a display.

15. The electronic device system of Claim 11, additionally comprising a microprocessor for executing the module.

16. An electronic device for analyzing a multimedia data object, the
20 electronic device comprising:

 means for determining the rendering requirements of at least a portion of a multimedia data object; and

 means for indicating the rendering requirements of the multimedia data object.

17. The electronic device of Claim 16, wherein the means for determining the rendering requirements includes means for determining for the portion of the multimedia data object a size of a substantially sufficient amount of data of the multimedia data object that must be sent to a client computer before the client computer renders a multimedia presentation represented by the multimedia data object.

18. The electronic device of Claim 16, wherein the means for indicating the rendering requirements further includes means for plotting a consumption graph.

19. The electronic device of Claim 16, wherein the means for determining the rendering requirements of at least a portion of the multimedia data object includes:
means for identifying a plurality of segments within the multimedia data object; and
5 means for determining the amount of data within each of the segments of the multimedia data object.
20. The electronic device system of Claim 15, additionally comprising a microprocessor.
21. A method of analyzing a multimedia data object that is adapted for rendering on an electronic device, the method comprising:
10 identifying a transmission rate;
determining a buffer time based upon the transmission rate and at least one characteristic of the multimedia data object; and
indicating the buffer time.
- 15 22. The method of Claim 21, wherein the characteristic includes a presentation requirement of multimedia data object.
23. The method of Claim 21, additionally comprising transmitting the buffer time from a server computer to a client computer.
24. A method of analyzing a multimedia data object that is adapted for rendering on an electronic device, the method comprising:
20 identifying a transmission rate;
determining a buffer time based upon the transmission rate and at least one characteristic of the multimedia data object; and
indicating the determined buffer time.
- 25 25. The method of Claim 21, wherein the characteristic includes a presentation requirement of multimedia data object.
26. The method of Claim 21, additionally comprising transmitting the indicated buffer size from a server computer to a client computer.
27. An electronic device, comprising:
30 a data object;
a display; and

a component configured to analyze the data object and display a buffer size or time that is used for buffering data on another electronic device.

28. The electronic device of Claim 27, wherein the component displays a consumption graph on the display.

5 29. The electronic device of Claim of Claim 28, wherein the electronic device modifies the consumption graph based upon a provided transmission rate.

30. A program storage device storing instructions that when executed performs the method comprising:

10 determining the rendering requirements of at least a portion of a multimedia data object; and

 indicating the rendering requirements of the multimedia data object.

31. The program storage device of Claim 30, wherein determining the rendering requirements includes determining the amount of data that is needed to render the presentation at each point of the portion of the presentation.

15 32. The program storage device of Claim 30, wherein determining the rendering requirements includes determining for the portion of the multimedia data object a size of a substantially sufficient amount of data of the multimedia data object that must be sent to a client computer before the client computer renders a multimedia presentation represented by the multimedia data object.

20 33. The program storage device of Claim 30, wherein indicating the rendering requirements further includes plotting a consumption graph on a display.

34. A screen display, comprising:

 an area for displaying data consumption characteristics of a multi-media object having non-uniform consumption characteristics; and

25 an area for displaying a buffer time for transmitting the multi-media object.

30 35. The screen display of Claim 34, wherein the buffer time indicates a duration of time that must pass in which an electronic device receives portions of the multi-media data object at a target transmission rate before the multi-media object is presented to a user.

36. The screen display of Claim 30, wherein the screen display is displayed by an electronic device.